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| 10/675,913 | 09/29/2003 | Petros Belimpasakis | 915-010.008 | 2083 |

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| EXAMINER | |
|---|---|
| CHEEMA, UMAR | |
| **ART UNIT** | **PAPER NUMBER** |
| 2444 | |

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| 12/23/2009 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/675,913 | BELIMPASAKIS, PETROS | |
| | Examiner | Art Unit | |
| | UMAR CHEEMA | 2444 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 November 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1,2,4,7-17,19,22-30,33 and 35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,7-17,19,22-30,33 and 35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

1. This action is in response to Request for Continued Examination (RCE) filed on 11/18/2009. Claims 1-2, 4, 7-17, 19, 22-30, 33, and 35 are pending in this action. Claims 1, 7, 9-11, 13, 16, 22, 25-26, 28, 33, and 35 are amended and claims 5, 6, 20, 21 are being cancelled.

### *Continued Examination Under 37 CFR 1.114*

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/2009 has been entered.

### *Response to Arguments*

3. Applicant's arguments with Applicant's arguments with respect to claims 1-2, 4, 7-17, 19, 22-30, 33, and 35 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-2, 4, 7-17, 19, 22-30, 33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. (hereinafter Takagi) (US Patent No. 6,091,733) in view of Sturniolo et al. (hereinafter Sturniolo) (US Patent No. US 6,201,962) and further in view of Henry et al. (hereinafter Henry) (US Pub. No. 2005/0165965).

5. Regarding claim 1, Takagi discloses the invention as claimed a method comprising: establishing a local connection in a terminal device (100) (see Fig. 2) between an application client (application (200)) and a proxy module (305) (see Fig. 2) according to a local access profile associated with the application client (see col. 1, lines 38-45) (Fig. 2); selecting an access point among a plurality of access points in the terminal device (see Fig. 2, accessing terminals a.a.a.1, a.a.b.1 etc.).

6. Takagi further discloses wherein each access point connects with the network using a respective transport bearer (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

7. Although Takagi discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: a remote server of a network through the selected access point so as to establish a communication connection between the terminal device.

8. In analogous teaching, Sturniolo discloses a remote server of a network through the selected access point so as to establish a communication connection between the terminal device (see abstract, col. 1, line 51-col. 2, line 20, figures 1-2 and details associated, col. 2-line 65- col. 4, line 13).

9. Thus, given the teaching of Sturniolo, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Sturniolo for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

10. Although Takagi-Sturniolo discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: wherein the proxy module provides at least one additional service for the application client or for the user of the device by selecting a new interface to be used in case one or more interfaces are available.

11. In analogous teaching, Henry discloses wherein the proxy module provides at least one additional service (establishing connection on its local cluster) for the application client or for the user of the device by selecting a new interface to be used in case one or more interfaces are available (see ¶¶ [0029, 0095, 0327]; at least two

interfaces for interfacing respective clusters of network devices in a network wherein said bridge device comprises at least two interface portals for connecting clusters).

12. Thus, given the teaching of Henry, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi-Sturniolo and Henry for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

13. Regarding claim 2, Takagi discloses the method of claim 1, wherein the communication connection of terminal device and the network is via an air interface (see col. 3, lines 50-59, figure 2 (IF interface (500,510)).

14. Regarding claim 3, (Canceled).

15. Regarding claim 4, Takagi discloses the method of claim 3, wherein the local connection and the further connection are client-server based connections (see col. 8, lines 22-25; figures 9-10; communication between server terminal and client terminal).

16. Regarding claim 5, (Canceled).

17. Regarding claim 6, (Canceled).

18. Regarding claim 7, Takagi discloses the method of claim 1, wherein the provided additional service comprises a service for selecting a bearer for crossing an air interface (see col. 3, lines 50-59, figure 2).

19. Regarding claim 8, Takagi discloses the method of claim 7, wherein the bearer operates in the protocol stack on a layer lower than a transport layer (see col. 6, lines 9-17).

20. Regarding claim 9, Takagi discloses the method of claim 1, wherein selecting the access point is performed based on information which comprises at least one of the following: network availability, user-defined rules, time, location, cost (see col. 6, lines 20-25; time period required for transmitting the segments).

21. Regarding claim 10, Takagi discloses the method of claim 1, wherein the provided additional service comprises providing a network interface not natively supported by an operating system of the device (see col. 1, lines 66-67, col. 2, lines 1-4).

22. Regarding claim 11, Takagi discloses the method of claim 1, wherein the provided additional service comprises providing support for multiple users (see col. 1, lines 38-40; server to clients).

23. Regarding claim 12, Takagi discloses the method of claim 11, wherein support for multiple users is implemented via a set of predefined user profiles (see col. 5, lines 63-67).

24. Regarding claim 13, Takagi discloses the method of claim 1, wherein the provided additional service comprises receiving information indicative of a change in a remote server address and modifying the remote server address at the terminal device by the proxy module, whereby no modification in the application client is needed (see col. col. 4, lines 45-57, col. 9, lines 32-50).

25. Regarding claim 14, Takagi discloses the method of claim 1, wherein the application client is an e-mail client, web browser or another end-user application (see col. 1, lines 10-16, figure 1).

26. Regarding claim 15, Takagi discloses the method of claim 8, wherein the transport layer is implemented by Transmission Control Protocol (see col. 4, lines 4-6, figure 3; TCP relay unit).

27. Regarding claim 16, Takagi discloses the invention as claimed an apparatus, comprising: a plurality of access interfaces (terminals a.a.a.1, a.a.b.1) (see Fig. 2), each configured to connect the apparatus with a network using a respective transport bearer (see Fig. 2 and details); a storage medium configured to store a plurality of application clients (application (200)) for use by the apparatus, and a proxy module (305) (see Fig. 2), configured to establish a local connection (100) between an application client (200) and the proxy module (305) according to a local access profile associated with the application client (see Fig. 2-3), select an access interface among the plurality of access interfaces in the apparatus, and establish a further connection between the proxy module and a remote server of a network through the selected access point so as to establish a communication connection between the apparatus and the network for the application client (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network). Takagi further discloses wherein each access point connects with the network using a respective transport bearer (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data

unit and a second interface for outputting the second transport layer protocol data unit to a network).

28. Although Takagi discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: a remote server of a network through the selected access point so as to establish a communication connection between the terminal device.

29. In analogous teaching, Sturniolo discloses a remote server of a network through the selected access point so as to establish a communication connection between the terminal device (see abstract, col. 1, line 51-col. 2, line 20, figures 1-2 and details associated, col. 2-line 65- col. 4, line 13).

30. Thus, given the teaching of Sturniolo, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Sturniolo for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

31. Although Takagi-Sturniolo discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: wherein the proxy module provides at least one additional service for the application client or for the user of the device by selecting a network interface to be used in case one or more interfaces are available.

32. In analogous teaching, Henry discloses wherein the proxy module provides at least one additional service (establishing connection on its local cluster) for the application client or for the user of the device by selecting a network interface to be

used in case one or more interfaces are available (see ¶¶ [0029, 0095, 0327]; at least two interfaces for interfacing respective clusters of network devices in a network wherein said bridge device comprises at least two interface portals for connecting clusters).

33. Thus, given the teaching of Henry, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi-Sturniolo and Henry for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

34. Regarding claim 17, the limitations of this claim has already been addressed (see claim 2 above for detail rejection).

35. Regarding claim 18, (Canceled).

36. Regarding claim 19, the limitations of this claim has already been addressed (see claim 4 above for detail rejection).

37. Regarding claims 20-21, (Canceled).

38. Regarding claims 22-30, the limitations of these claims have already been addressed (see claims 7-15 above for detail rejection).

39. Regarding claims 31-32, (Canceled).

40. Regarding claim 33, Takagi discloses the invention as claimed a computer program product comprising a computer readable storage medium storing program thereon for use by a communication device, wherein the program code comprises: instructions for establish a local connection in the communication device (100) between

an application client (application (200)) and a proxy module (305) according to a local access profile associated with the application client (see col. 1, lines 38-45) (Fig. 2), instructions for selecting an access point among a plurality of access points in the communication device (see Fig. 2, accessing terminals a.a.a.1, a.a.b.1 etc.).

41. Takagi further discloses wherein each access point connects with the network using a respective transport bearer (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

42. Although Takagi discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: a remote server of a network through the selected access point so as to establish a communication connection between the terminal device.

43. In analogous teaching, Sturniolo discloses a remote server of a network through the selected access point so as to establish a communication connection between the terminal device (see abstract, col. 1, line 51-col. 2, line 20, figures 1-2 and details associated, col. 2-line 65- col. 4, line 13).

44. Thus, given the teaching of Sturniolo, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Sturniolo for a transport layer communication system. Motivation for doing so would

have been that the system makes communication between multiple access points reliable and secure.

45. Although Takagi-Sturniolo discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: wherein the proxy module provides at least one additional service for the application client or for the user of the device by selecting a network interface to be used in case one or more interfaces are available.

46. In analogous teaching, Henry discloses wherein the proxy module provides at least one additional service (establishing connection on its local cluster) for the application client or for the user of the device by selecting a network interface to be used in case one or more interfaces are available (see ¶¶ [0029, 0095, 0327]; at least two interfaces for interfacing respective clusters of network devices in a network wherein said bridge device comprises at least two interface portals for connecting clusters).

47. Thus, given the teaching of Henry, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi-Sturniolo and Henry for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

48. Regarding claim, 34 (Canceled).

49. Regarding claim 35, Takagi discloses the invention as claimed an apparatus, comprising: a plurality of access (terminals a.a.a.1, a.a.b.1) (Fig. 2) means, each for connecting the apparatus with a network using a respective transport bearer (300) (see

TCP); means for selecting an access means among the plurality of access means in the apparatus (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

50. Takagi further discloses wherein each access point connects with the network using a respective transport bearer (see abstract, col. 3, lines 50-65, figure 2 and details associated, see col. col. 4, lines 45-57, col. 9, lines 32-39, col. 1, lines 65-col. 2 line 29; transport data unit containing data as contained in the first transport layer protocol data unit and a second interface for outputting the second transport layer protocol data unit to a network).

51. Although Takagi discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: a remote server of a network through the selected access point so as to establish a communication connection between the terminal device.

52. In analogous teaching, Sturniolo discloses a remote server of a network through the selected access point so as to establish a communication connection between the terminal device (see abstract, col. 1, line 51-col. 2, line 20, figures 1-2 and details associated, col. 2-line 65- col. 4, line 13).

53. Thus, given the teaching of Sturniolo, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi and Sturniolo for a transport layer communication system. Motivation for doing so would

have been that the system makes communication between multiple access points reliable and secure.

54. Although Takagi-Sturniolo discloses substantial features of applicant's claimed invention, Takagi fails to expressly disclose: wherein the proxy module provides at least one additional service for the application client or for the user of the device by selecting a network interface to be used in case one or more interfaces are available.

55. In analogous teaching, Henry discloses wherein the proxy module provides at least one additional service (establishing connection on its local cluster) for the application client or for the user of the device by selecting a network interface to be used in case one or more interfaces are available (see ¶¶ [0029, 0095, 0327]; at least two interfaces for interfacing respective clusters of network devices in a network wherein said bridge device comprises at least two interface portals for connecting clusters).

56. Thus, given the teaching of Henry, it would have been obvious to one of the ordinary skill person in the art of networking to combine the teaching of Takagi-Sturniolo and Henry for a transport layer communication system. Motivation for doing so would have been that the system makes communication between multiple access points reliable and secure.

***Conclusion***

57. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C./
Examiner, Art Unit 2444
/William C. Vaughn, Jr./
Supervisory Patent Examiner, Art Unit 2444